Application No. 09/824,741 Amendment dated October 6, 2004 Reply to Office Action of June 17, 2004

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims**:

Claim 1 –17 (cancelled)

Claim 18 (previously presented) A method of purifying a hydrogen peroxide solution in the absence of calcium carbonate, comprising:

- (a) providing an anion exchange resin bed contained within a column,
- (b) providing ultra-high purity carbon dioxide gas,
- (c) passing said ultra-high purity carbon dioxide gas through said anion exchange resin bed, thus forming an ion exchange resin in the bicarbonate form, and
- (d) passing the hydrogen peroxide solution through said column containing said anion exchange resin bed.

Claim 19 (original) The method of Claim 18, wherein the hydrogen peroxide solution has a hydrogen peroxide concentration of 50 weight percent or less.

Claim 20 (original) The method according to Claim 18, wherein the resin is a DOW 550® anionic exchange resin.

Claim 21 (original) The method according to Claim 18, wherein the hydrogen peroxide solution is passed through the column in an upflow mode.

Claim 22 (original) The method according to Claim 18, further comprising passing the hydrogen peroxide solution through a second column ion exchange column in series with the first column.

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Claim 23 (original) The method according to Claim 22, wherein said second column contains a cation exchange resin.

Claim 24 (original) The method according to Claim 22, further comprising passing the hydrogen peroxide solution through a third column for removing total organic carbon impurities in said hydrogen peroxide solution, wherein the said third column is connected in series with and upstream of the first and second columns.

Claim 25 (original) The method according to Claim 18, wherein ionic impurities are removed from a hydrogen peroxide solution.